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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MANCHO, RONNIE M

ART UNIT PAPER NUMBER

3663

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,822

Applicant(s)

MOORE ET AL.

Examiner

Ronnie Mancho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-17, and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellanger R (WO 86/06190) in view of Monson et al (5220876).

Regarding claim 11, Bellanger (WO 86/06190; fig. 1, see page 5 etc) discloses an apparatus for displaying the performance of an agricultural tractor during operation in an agricultural field comprising:

a sensor (21-25 page 6, lines 1+) for generating a signal that is representative of an operating characteristic of the agricultural tractor; and

a controller 40 (fig. 3) that is responsive to said signal from said sensor (21-24).

Although Bellanger R (WO 8606190) in the abstract mentioned that the controller generates parameters of the performance of the agricultural tractor during operation in the field, he did not disclose that a map was generated by the controller. However, Monson et al (col. 8, lines 45-55, see fig. 1) teaches of a controller 12 that generates a map of the performance of an agricultural vehicle during operation in a field. Therefore, it would have been obvious to one of ordinary skill in the art tractors at the time the invention was made to modify the Bellanger

device as taught by Monson et al for the purpose of easing the operators needs (see Monson col. 8, lines 49-53).

Regarding claim 12, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 11, wherein said sensor (21-25) is an engine sensor that generates a signal that is representative of an operating characteristic of an engine 12 provided on the agricultural tractor.

Regarding claim 13, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 12, wherein said engine sensor (21-25) is a sensor that generates a signal that is representative of the speed of the engine 12.

Regarding claim 14, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 12, wherein said engine sensor (21-25) is a sensor that generates a signal that is representative of the amount of fuel supplied to the engine 12.

Regarding claim 15, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 11, wherein said engine sensor (21-25) is a sensor that generates a signal that is representative of the speed of the tractor.

Regarding claim 16, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 11 wherein said sensor is a power take off sensor (PTO, col. 6, line 4) that generates a signal that is representative of an operating characteristic of a power take off (PTO) provided on the tractor.

Regarding claim 17, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 16 wherein said a Power Take Off sensor (PTO 24; see page 6, lines 4+ & last seven lines) is a sensor that generates a signal representative of the speed of the power take off.

Regarding claim 21, Bellanger (page 6, lines 1+) discloses the apparatus defined in Claim 11, but Bellanger R (WO 8606190) did not disclose a position sensor for generating a signal that is representative of the position of the tractor in the agricultural field. However, Monson et al (abstract and fig. 1) teaches of a position sensor (GPS) for generating a signal that is representative of the position of a tractor in an agricultural field. Therefore, it would have been

obvious to one of ordinary skill in the art of tractors, at the time the invention was made, to modify the Bellanger apparatus to include a position sensor (GPS) as taught by Monson et al because the location of the tractor in the Bellanger device can be indicated in real time and also maps using the position sensor GPS system are provided to ensure a more cost effective operation of the tractor.

Regarding claim 22, Monson et al (abstract and fig. 1) disclose the apparatus defined in Claim 21, wherein said position sensor is a global satellite navigation system (GPS).

Regarding claim 23, (Bellanger, page 6, lines 1+) disclose the apparatus defined in Claim 11, further including an actual speed sensor 22 that generates a signal that is representative of the actual speed of the agricultural tractor over ground, said controller 40 (fig. 3) being responsive to said signals from said sensor (21-25), and said actual speed sensor 22. On the other hand, Bellanger did not disclose that a map was generated by the controller. However, Monson et al (col. 8, lines 45-55, see fig. 1) teaches of a controller 12 that generates a map of the performance of an agricultural vehicle during operation in a field. Therefore, it would have been obvious to one of ordinary skill in the art tractors at the time the invention was made to modify the Bellanger device as taught by Monson et al for the purpose of easing the operators needs (see Monson col. 8, lines 49-53).

Regarding claim 24, (Bellanger, page 6, lines 1+) disclose the apparatus defined in Claim 11, further including a theoretical speed sensor 23 that generates a signal that is representative of the theoretical speed of the agricultural tractor over ground if no wheel slip is occurring, said controller 40 being responsive to said signals from said engine sensor (21-25), and said theoretical speed sensor 23. On the other hand, Bellanger did not disclose that a map was generated by the controller. However, Monson et al (col. 8, lines 45-55, see fig. 1) teaches of a controller 12 that generates a map of the performance of an agricultural vehicle during operation in a field. Therefore, it would have been obvious to one of ordinary skill in the art tractors at the

time the invention was made to modify the Bellanger device as taught by Monson et al for the purpose of easing the operators needs (see Monson col. 8, lines 49-53).

Regarding claim 25, (as best understood), Bellanger, (page 6, lines 1+) disclose the apparatus defined in Claim 11 further including a manual input device (37, 38, page 7, lines 17+; page 8, lines 13-17, fig. 3) that generates a signal that is representative of a parameter, said controller 40 being responsive to said signal from said engine sensor (21-25), and said manual input device (37, 38). On the other hand, Bellanger did not disclose that a map was generated by the controller. However, Monson et al (col. 8, lines 45-55, see fig. 1) teaches of a controller 12 being responsive to signals from an engine sensors and a manual input device 20 for generating a map of the performance of an agricultural vehicle during operation in a field. Therefore, it would have been obvious to one of ordinary skill in the art tractors at the time the invention was made to modify the Bellanger device as taught by Monson et al for the purpose of easing the operators needs (see Monson col. 8, lines 49-53).

1. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellanger R (WO 86/06190) and Monson et al as applied to claim 11 and further in view of Bellanger Regis (2093676 A)

Regarding claim 18, Bellanger R (WO 8606190) and Monson et al disclose the apparatus as defined in Claim 11, but did not disclose a linkage sensor although on page 5, line 17 Bellanger R (WO 8606190) mentioned an implement linkage (three-point hitch 9). However, Bellanger Regis (2093676 A) in his other patent on page 2, lines 65-67, discloses a linkage (draft link 11) sensor 33 for generating a signal that is representative of an operating characteristic of a three point linkage provided on an agricultural tractor. Therefore, it would have been obvious to one of ordinary skill in the art of agricultural tractors (at the time the invention was made) to include a linkage sensor in the Bellanger R (WO 8606190) / Monson device as taught by Bellanger Regis (2093676 A) because the displacement of the linkage can be monitored on a

display or control panel therefore aiding the proper connection (or linking) of the tractor to an implement.

Regarding claim 19, Bellanger Regis (2093676 A), page 2, lines 65-67, discloses the apparatus defined in Claim 18 wherein said linkage 33 is a sensor that generates a signal that is representative of the draft force of the three point linkage.

Regarding claim 20, Bellanger Regis (2093676 A), page 2, lines 65-67, discloses the apparatus defined in Claim 18 wherein said linkage sensor 33 is a sensor that generates a signal that is representative of the position of the three point linkage.

Response to Arguments

3. Applicant's arguments filed 1-08-04 have been fully considered but they are not persuasive. The request for reconsideration has been considered, but the prior art still reads on the claims.

Particularly, the applicant is arguing that the prior art (Monson et al 5220876) does not disclose mapping the performance of an agricultural tractor during operation in an agricultural field. The examiner disagrees. As pointed out in the last official action, Monson et al (col. 8, lines 45-55, see fig. 1) clearly teaches of a controller 12 being responsive to signals from an engine sensor and a manual input device 20 for generating a map of the performance of an agricultural vehicle during operation in a field.

The applicant indicates that the claimed limitation can be seen in applicant's fig. 2. That is on page 7, lines 2+ of the application, the applicant indicates "a map showing one of the tractor sensed parameters". Similarly, the prior art Monson et al col. 7, lines 47-57 disclose a maps 80-84 which are continuously updated by a processor 12 in response to signals from a soil

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map analyzer 14 on a tractor. Therefore, Monson et al discloses the limitation of mapping the performance of an agricultural tractor during operation in an agricultural field.

Communication

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305- 9707. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Ronnie Mancho
Examiner
Art Unit 3661

February 9, 2004


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3661